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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,791	08/16/2002	Boris A. Movchan	13DV-13975	4089
30952	7590	11/22/2004		
HARTMAN AND HARTMAN, P.C. 552 EAST 700 NORTH VAIPARAISO, IN 46383			EXAMINER VO, HAI	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 11/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/064,791

**Applicant(s)**

MOVCHAN ET AL.

**Examiner**

Hai Vo

**Art Unit**

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0503.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The double patenting rejections over US 6,492,038 are withdrawn in view of the submission of the terminal disclaimer.
2. The 102(e) art rejections over Rigney et al (US 6,492,038) are withdrawn in view of the declaration filed on 08/06/2004. However, upon further consideration, a new ground(s) of rejection is made in view of Darolia et al (US 6,808,799), Alperine et al (US 6,312,832) and JP 02-301550.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 26-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,808,799. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-15 of U.S. Patent No. 6,808,799 disclose each and every element of the presently claimed subject matter in addition to specific composition of the thermal insulating material.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 26-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Alperine et al (US 6,312,832). Alperine discloses a thermal barrier coating deposited on a superalloy substrate. The thermal barrier coating contains an appreciable quantity of CO or CO<sub>2</sub> that is trapped within the pores and between grain boundaries of the thermal barrier coating (column 4, lines 5-20, 55-60, column 6, lines 10-30). Some of the pores contain the element carbon (column 6, lines 25-27). The thermal barrier coating has an open porosity level of 25 to 50 volume percent (column 4, lines 55-60). The thermal barrier coating is predominately yttria-stabilized zirconia (column 6, lines 55-60). The microstructure of the thermal barrier coating comprises columnar grains (column 5, lines 15-20). The thermal barrier coating comprising a metallic sublayer (example 1). Accordingly, it is the examiner's position that Alperine anticipates or strongly suggests the claimed subject matter.
7. Claims 26-30, 32, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2-301550. JP'550 discloses a thermal barrier coating of yttria-

stabilized zirconia treated with hot isostatic pressing (HIP) (page 3). The HIP treatment uses Ar gas (page 4). The HIP treatment is to convert the open pores of the coating to the close pores. The thermal barrier coating obtained by HIP treatment in a reducing atmosphere using carbon power as a packing powder. Accordingly, the thermal barrier coating contains a quantity of CO or CO<sub>2</sub>, Ar and residual carbon that are trapped within the pores and between grain boundaries of the thermal barrier coating accordance with the process as disclosed in the JP'550 invention. Accordingly, it is the examiner's position that JP'550 anticipates or strongly suggests the claimed subject matter.

***Response to Arguments***

8. The terminal disclaimer filed on 08/06/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,492,038 reviewed and is accepted. The terminal disclaimer has been recorded. The double patenting rejections over U.S. Patent 6,492,038 in the 04/06/2004 Office Action have been overcome by the terminal disclaimer filed on 08/06/2004.
9. The 102 (e) art rejections over Rigney et al (US 6,492,038) have been overcome by the declaration filed on 08/06/2004. In the declaration, Mr. Darolia states that the elemental carbon and insoluble gas disclosed but not claimed in the Rigney reference was derived from him and thus this subject matter is not the invention by another.

**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

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